

NWS FORM E-5

(11-88)

(PRES. by NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION****NATIONAL WEATHER SERVICE****HYDROLOGIC SERVICE AREA (HSA)****WFO Jackson, Mississippi****MONTHLY REPORT OF HYDROLOGIC CONDITIONS**

REPORT FOR:

MONTH

YEAR

March**2014**

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7320
Silver Spring, MD 20910-3283

SIGNATURE

Alan E. Gerard, Meteorologist In-Charge

DATE

4/25/2014

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)



An X inside this box indicates that no river flooding occurred within this hydrologic service area.

Synopsis...

March was a terribly cold month this year. The temperature average was three to four degrees below normal. There was even one instance of snow in the beginning of the month. Precipitation-wise, every Automated Surface Observing Site (ASOS) location recorded above normal rainfall for the month, except Greenwood. All these locations besides Greenwood received five or more inches during the month. For the year as a whole, all ASOS locations are still below normal for rainfall. This has led the drought monitor to categorize the Delta, including Northeast Louisiana and Southeast Arkansas, into the "abnormally dry" and "moderate drought" categories. The soil moisture anomaly map shows the same area with below normal soil moistures.

The first days of March were quiet until a cold front charged through the Hydrologic Service Area (HSA) on the 3rd. A little bit of rain fell throughout the area as well as a few snowflakes and a little bit of sleet. Temperatures remained cold the next few days. The front stalled along the Gulf Coast and brought rain to the southern portion of the HSA on the 5th. A low pressure system then formed in the Gulf on the 6th. As it progressed northeastward into the Deep South, it brought a bit of additional rain to the HSA on the 6th and 7th, up to an inch in northern parts of the HSA.

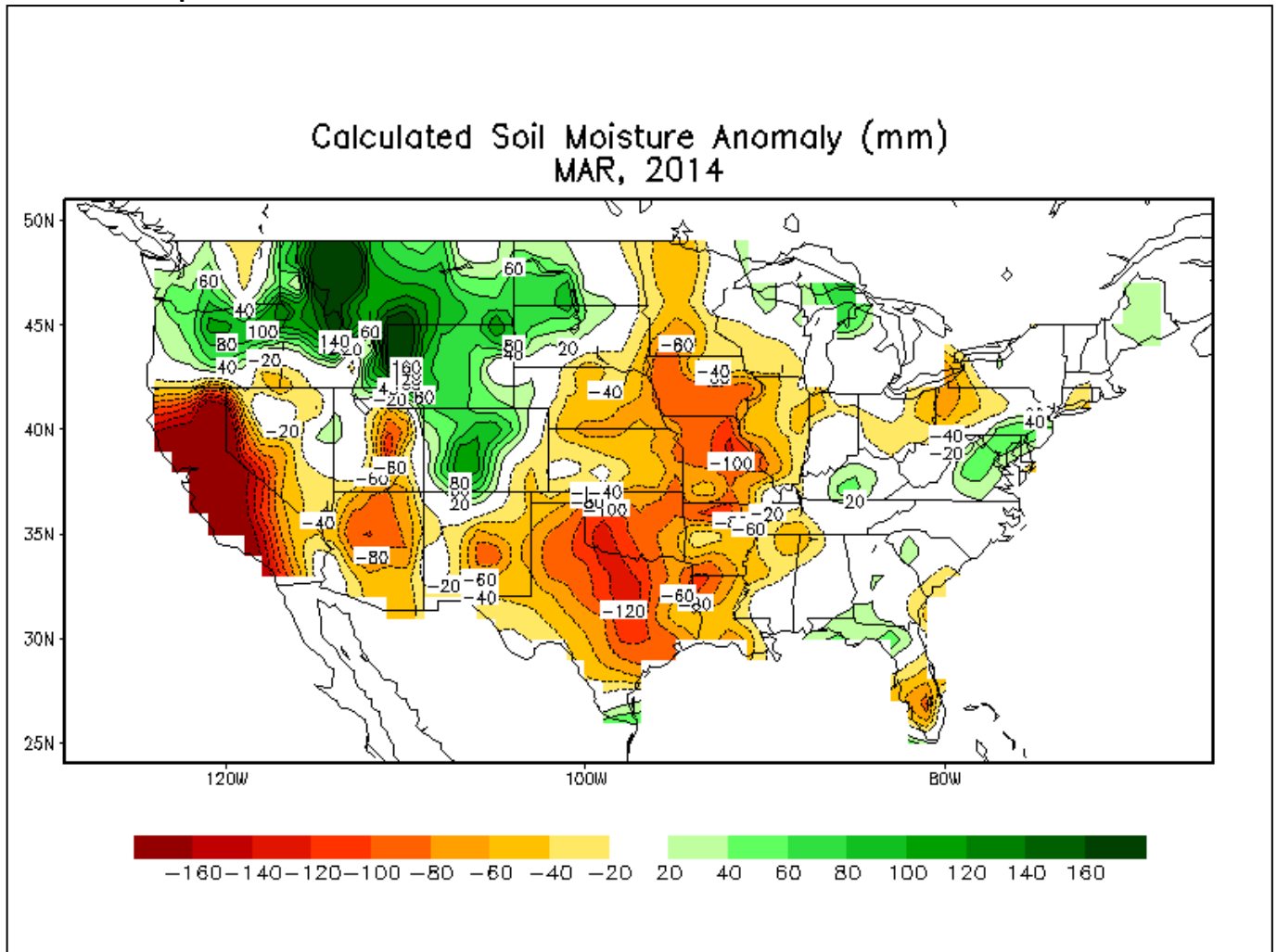
The next major system was a Gulf low pressure which moved across the area on the 12th. It dropped up to one inch of rainfall along the Mississippi River on the Louisiana side and up to two inches in the very far southeastern counties of the HSA.

A very progressive cold front pushed through on the 16th and left the area wet, but rain-free, for St. Patrick's Day. Widespread one to two inches of rain fell, with a few locations receiving up to 3 inches with this system. High pressure settled in behind the front and allowed temperatures to warm up for a while. The next rain producer was a cold front which passed through on the 23rd and 24th. This system produced overall spotty rainfall, but pockets of 1.5+ inches were found near Natchez, Mississippi and in the Golden Triangle area in northeast Mississippi.

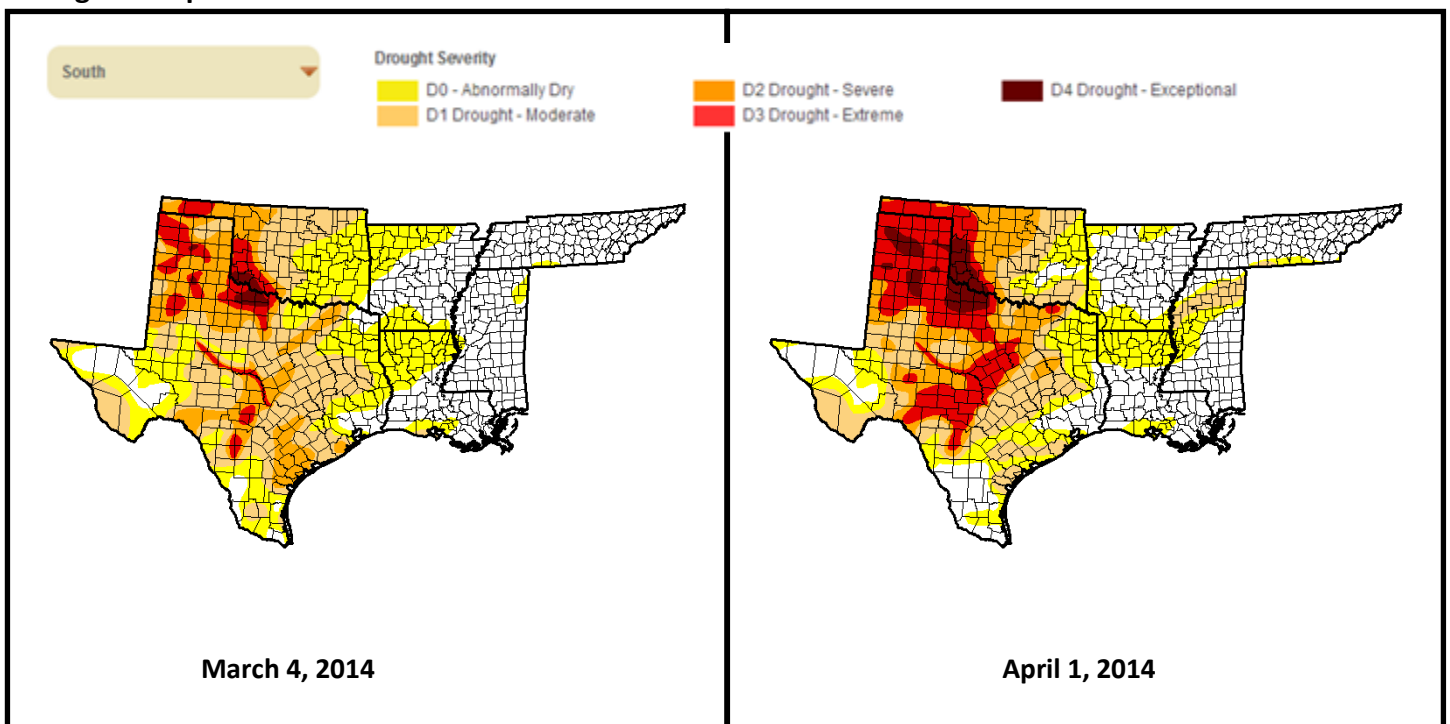
High pressure again established itself in the HSA after the front and the weather was quiet for a few days. This allowed the atmosphere to prep for a good spring severe weather outbreak on the 28th and 29th. No tornadoes were reported within the HSA. However, plenty of hail and strong winds were reported in the Delta. A few areas around the HSA reported localized flash flooding due to the high rainfall rates. Within a 72-hour period, some locations in the Delta received up to eight inches of rainfall. Throughout the HSA though, widespread three to four inch amounts were reported.

River and Soil Conditions...

Soil Moisture Map:

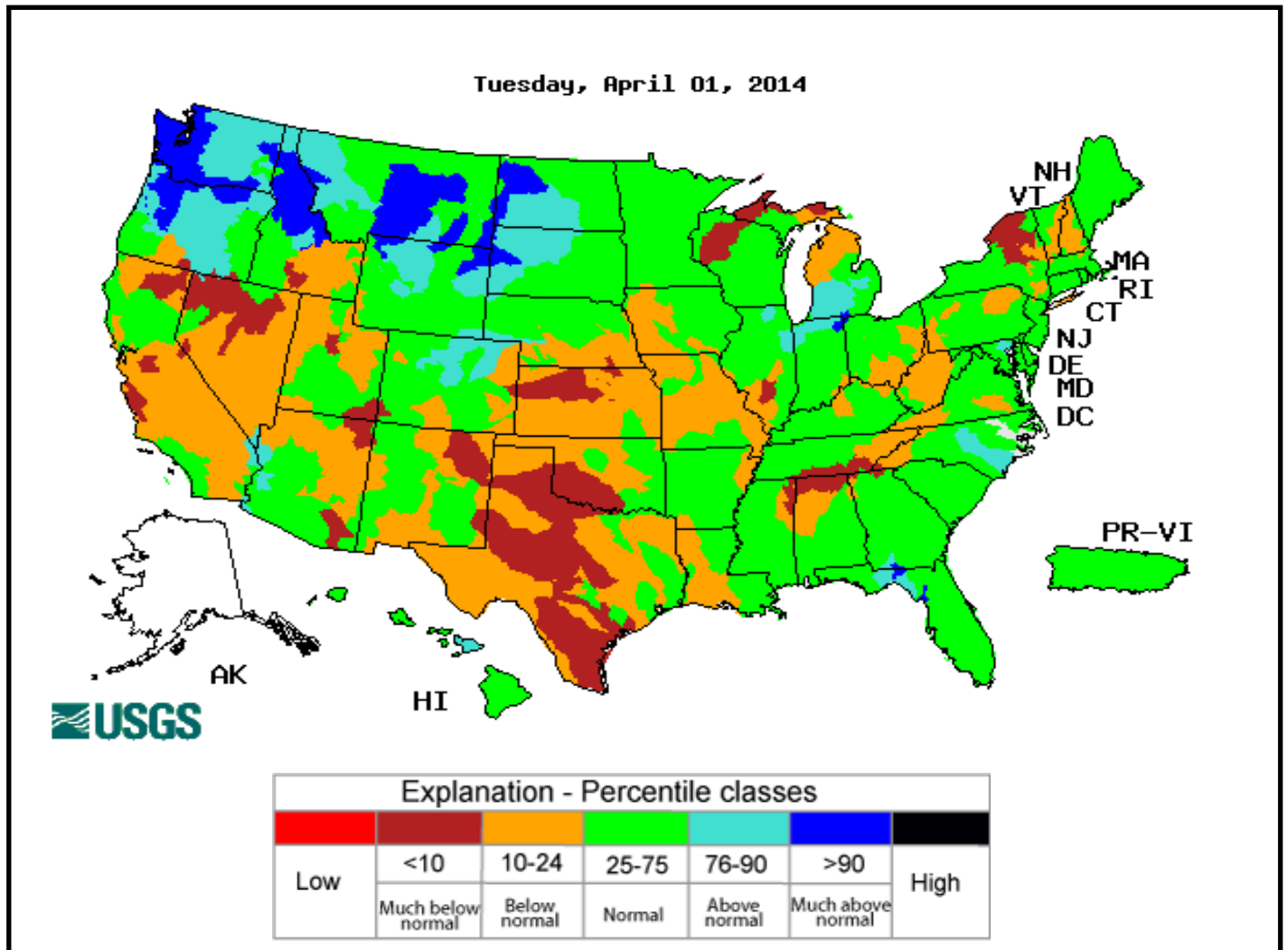


Drought Comparison:



Streamflow:

The United States Geological Survey's (USGS) March 2014 river streamflow records were compared with all historical March streamflow records. Streamflow was normal across all of the Jackson HSA in Mississippi, Louisiana, and Arkansas.



River Conditions:

Minor flooding occurred along the Pearl River at Philadelphia, Edinburg, Rockport, and Monticello. Minor flood also occurred on the Tallahala at Laurel, Noxubee at Macon, Tuscolameta Creek at Walnut Grove, and all forecast points on the Big Black River. Minor to moderate rises occurred along the remaining rivers in the HSA. The Mississippi River had a minor rise during the first week of the month but trended downward for the remainder of the month.

Climatic Outlook and Flood Potential:

The climatic outlook favors above normal temperatures over the next 3 months. As for precipitation, the outlook shows an equal chance for above, below, and normal precipitation over the next 3 months. Based on current soil moisture, streamflow, and the 3-month weather outlook, the flood potentials are as follows:

Pearl River System: Average.

Yazoo River System: Average.

Big Black River System: Average.

Homochitto River System: Average.

Pascagoula River System: Average.

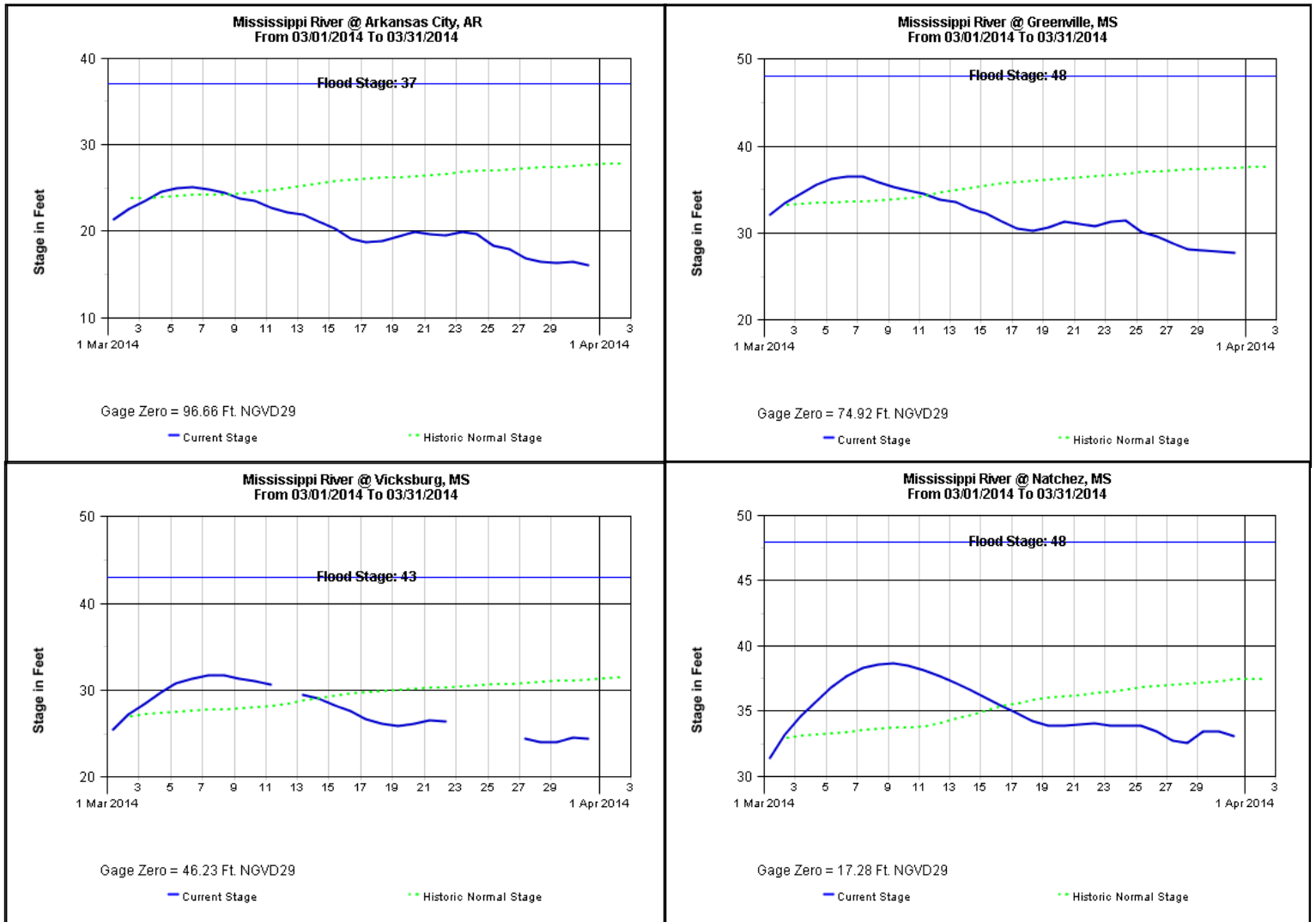
Northeast LA and Southeast AR: Average.

Tombigbee River System: Average.

Mississippi River: Average.

Mississippi River Plots March 2014

Plots courtesy of the United States Army Corps of Engineers



Monthly Preliminary High and Low Stages:

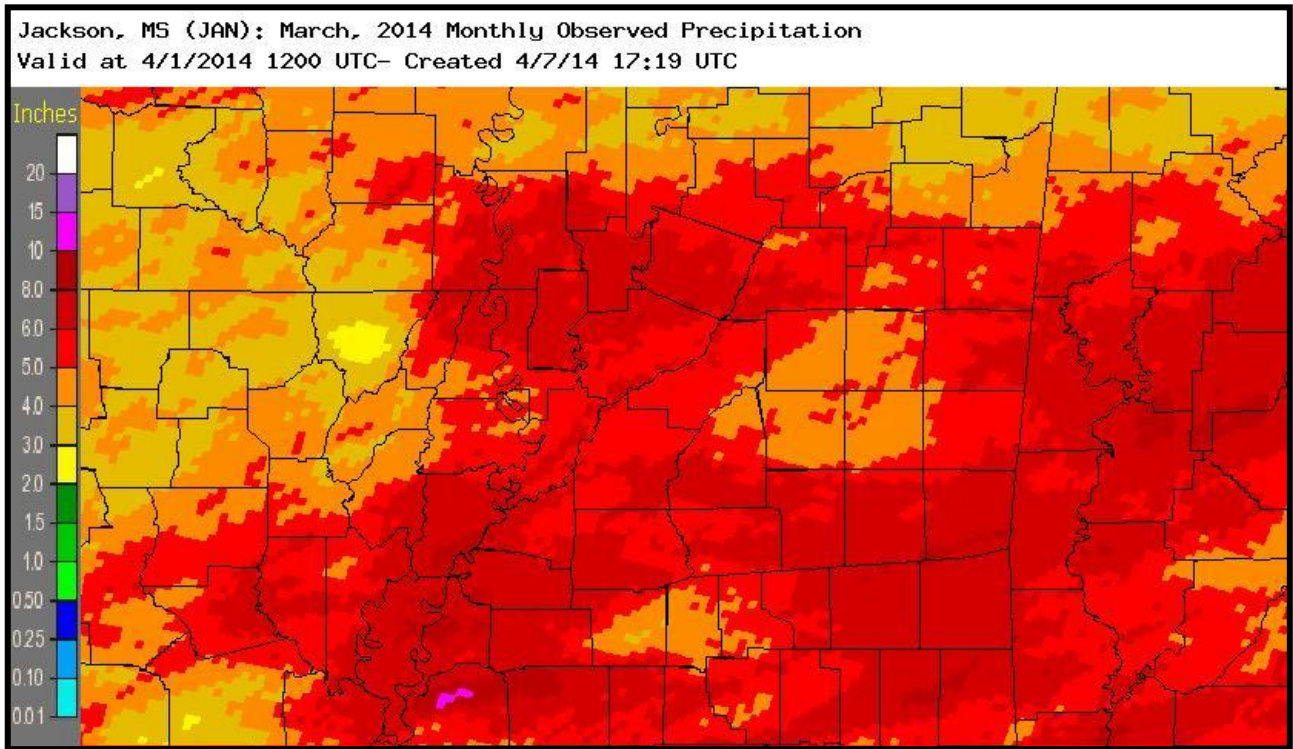
Location	Flood Stage (ft)	High Stage (ft)	Date	Low Stage (ft)	Date
Arkansas City	37	25.04	3/06	16.02	3/31
Greenville	48	36.47	3/06	27.74	3/31
Vicksburg	43	31.77	3/08	24.00	3/28
Natchez	48	38.68	3/09	32.61	3/28

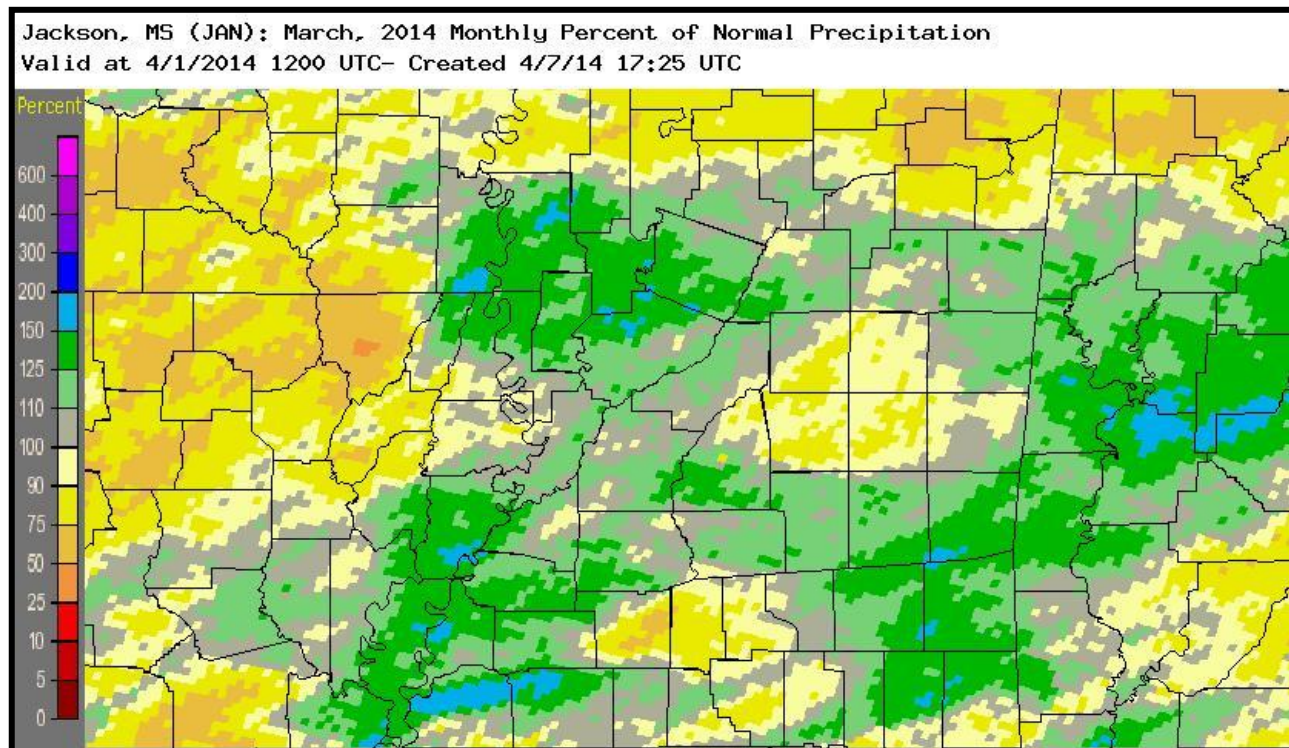
Rainfall for the Month of March:

The largest rainfall amounts in the HSA from NWS Cooperative Observer reports during the period from 7 am on February 28th until 7 am on March 31st were:

9.44 inches at Shubuta, MS; 9.09 inches at Pat Harrison Waterway's Archusa Water Park, MS; 8.49 inches at Crandall, MS, 8.29 inches at Yazoo City, MS; 7.90 inches at St. Joseph, LA; 7.84 inches at Eudora, AR; 7.78 inches at Bay Springs, MS; 7.34 inches at Jonesville Lock and Dam, LA; 7.32 inches at Purvis, MS; 7.31 inches at Port Gibson, MS; 7.21 inches at Union Church, MS; 7.18 inches at Natchez, MS; and 7.09 inches at Hazlehurst, MS.

March Rainfall Estimates:





Note: Observer rainfall and MPE may differ due to time differences.

March Rainfall for Selected Cities:

City (Airport)	Rainfall	Departure from Normal	2014 Rainfall	2014 Departure from Normal
Jackson (KJAN)	5.65	+0.61	12.70	-2.07
Meridian (KMEI)	5.74	+0.32	15.09	-1.06
Greenville (KGLH)	5.51	+0.96	9.81	-4.73
Greenwood (KGWO)	4.08	-0.23	10.36	-2.89
Hattiesburg (KHBG)	6.37	+0.87	16.27	-0.36
Vicksburg (KTVR)	5.93	+0.90	11.35	-4.02

Total Flood Warning products issued: 11

Total Flood Statement products issued: 38

Total Flood Advisories MS River: 0

Daily Climate and Ag WX Products (AGO'S) issued: 31

Daily CoCoRaHS Rainfall Products (LCO'S) issued: 31

Daily River and Lake Summary Products (RVD'S) issued: 31

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&

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Note: Provisional stage and precipitation data were furnished with the cooperation of the Mississippi, Louisiana, and Arkansas National Weather Service Cooperative Observer Programs, United States Geological Survey (USGS), United States Army Corps of Engineers (USACE), Pearl River Valley Water Supply District (PRVWSD), Pat Harrison Waterway District, Pearl River Basin Development District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
USACE Vicksburg District
USACE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
Lower Mississippi River Forecast Center
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District
Pearl River Basin Development District